

IAP12 Rec'd PCT/PTO 24 AUG 2006

SEQUENCE LISTING.txt
SEQUENCE LISTING

<110> THE UNIVERSITY OF MANCHESTER

FREEMONT, ANTHONY

HOYLAND, JUDITH

<120> TREATMENT OF SPINAL CONDITIONS

<130> PCB/P89569PWO

<140> PCT/GB05/000713

<141> 2005-02-25

<160> 1

<170> PatentIn version 3.1

<210> 1

<211> 5733

<212> DNA

<213> Homo sapiens

```

<400> 1
catcatcaat aatatacctt attttggatt gaagccaata tgataatgag ggggtggagt      60
ttgtgacgtg gcgcggggcg tgggaacggg gcgggtgacg tagtagtgtg gcggaagtgt      120
gatgttgcaa gtgtggcgga acacatgtaa gcgacggatg tggcaaaagt gacgtttttg      180
gtgtgcgccg gtgtacacag gaagtgacaa ttttcgcgcg gttttaggcg gatgttgtag      240
taaatttggg cgtaaccgag taagatttgg ccattttcgc gggaaaactg aataagagga      300
agtgaaatct gaataatttt gtgttactca tagcgcgtaa tatttgtcta gggccgcggg      360
gactttgacc gtttacgtgg agactcgccc aggtgttttt ctcaggtgtt ttccgcgttc      420
cggggtcaaag ttggcgtttt attattatag tcagctgacg tgtagtgtat ttatacccg      480
tgagttcctc aagaggccac tcttgagtgc cagcgagtag agttttctcc tccgagccgc      540

```

SEQUENCE LISTING.txt

tccgacaccg	ggactcgagt	gttgacattg	attattgact	agttattaat	agtaatcaat	600
tacgggggtca	ttagttcata	gcccataatat	ggagttccgc	gttacataac	ttacggtaaa	660
tggcccgct	ggctgaccgc	ccaacgaccc	ccgcccattg	acgtcaataa	tgacgtatgt	720
tcccatagta	acgccaatag	ggactttcca	ttgacgtcaa	tgggtggagt	atttacggta	780
aactgcccac	ttggcagtac	atcaagtgt	tcatatgcc	agtacgcccc	ctattgacgt	840
caatgacgg	aaatggcccc	cctggcatta	tgcccagtac	atgaccttat	gggactttcc	900
tacttggcag	tacatctacg	tattagtc	cgctattacc	atgggtgatgc	ggttttggca	960
gtacatcaat	gggcgtggat	agcggtttga	ctcacgggga	tttccaagtc	tccaccccat	1020
tgacgtcaat	gggagtttgt	tttggcacca	aaatcaacgg	gactttccaa	aatgtcgtaa	1080
caactccgcc	ccattgacgc	aaatggg	taggcgtgta	cggtgggagg	tctatataag	1140
cagagctcgt	ttagtgaacc	gtaagcttga	tcttggtggc	gtgaaactcc	cgcacctctt	1200
cggccagcgc	ctttagaag	cgcgtatggg	atctgactac	aaagacgatg	acgacaagg	1260
atcctccgag	gactccgcg	gctcgccctg	cccgtcgggc	tccggctcgg	acaccgagaa	1320
cacgcggccc	caggagaaca	cggtcccca	gggcgagccc	gatctgaaga	aggagagcga	1380
ggaggacaag	ttccccgtgt	gcatccgcga	ggcggtcagc	cagggtgctca	aaggctacga	1440
ctggagcgtg	gtgccc	cggtgcgcgt	caacggctcc	agcaagaaca	agccgcacgt	1500
caagcggccc	atgaacgcct	tcatggtgtg	ggcgcagggc	gcgcgcagga	agctcgcgga	1560
ccagtacccg	cacttgaca	acgccgagct	cagcaagacg	ctgggcaagc	tctggagact	1620
tctgaacgag	agcgagaagc	ggcccttcgt	ggaggaggcg	gagcggctgc	gcgtgcagca	1680
caagaaggac	cacccggatt	acaagtacca	gccgcggcgg	aggaagtcgg	tgaagaacgg	1740
gcaggcggag	gcagaggagg	ccacggagca	gacgcacatc	tcccccaacg	ccatcttcaa	1800
ggcgtgcag	gccgactcaa	gcttgccaca	ctcctcctcc	ggcatgagcg	aggtgcactc	1860
ccccggcgag	cactcggggc	aatcccagg	cccaccgacc	ccaccaccca	ccccaaaac	1920
cgacgtgcag	ccgggcaagg	ctgacctgaa	gcgagagggg	cgccccttgc	cagagggggg	1980
cagacagccc	cctatcgact	tccgcgacgt	ggacatcggc	gagctgagca	gcgacgtcat	2040
ctccaacatc	gagaccttcg	atgtcaacga	gtttgaccag	tacctgccgc	ccaacggcca	2100
cccgggggtg	ccggccacgc	acggccagg	cacctacacg	ggcagctacg	gcatcagcag	2160
caccgcggcc	accccggcga	gcgcgggcca	cgtgtggatg	tccaagcagc	aggcgccgcc	2220
gccacccccg	cagcagcccc	cacaggcccc	gccggccccg	caggcgcccc	cgcagccgca	2280
ggcggcgccc	ccacagcagc	cggcggcacc	cccgcagcag	ccacaggcgc	acacgctgac	2340
cacgctgagc	agcgagccgg	gccagtccca	gcgaacgcac	atcaagacgg	agcagctgag	2400
ccccagccac	tacagcgagc	agcagcagca	ctcgcccca	cagatcgctt	acagcccctt	2460

SEQUENCE LISTING.txt

caacctccca	cactacagcc	cctcctaccc	gcccattcacc	cgctcacagt	acgactacac	2520
cgaccaccag	aactccagct	cctactacag	ccacgcggca	ggccagggca	ccggcctcta	2580
ctccaccttc	acctacatga	accccgtca	gcgccccatg	tacacccccca	tcgccgacac	2640
ctctgggggtc	ccttccatcc	cgcagaccca	cagccccccag	cactgggaac	aacccgtcta	2700
cacacagctc	actcgacctt	gagaattcct	tgtagagggt	ttacttgctt	taaaaaacct	2760
cccacacctc	cccctgaacc	tgaaacataa	aatgaatgca	attggtgttg	ttaacttggt	2820
tattgcagct	tataatgggt	acaaataaag	caatagcatc	acaaatttca	caaataaagc	2880
atTTTTTTTca	ctgcattcta	gttgtggttt	gtccaaactc	atcaatgtat	cttatcatgt	2940
ctggatcatc	gatccataac	ttcgtataat	gtatgctata	cgaagtatat	cagatctggt	3000
tctatagtgt	cacctaaatc	gtatgtgtat	gatacataag	gttatgtatt	aattgtagcc	3060
gcgttctaac	gacaatatgt	ccatagggcc	cctacgtcac	ccgccccgtt	cccacgcccc	3120
gcgccacgtc	acaaactcca	ccccctcatt	atcatattgg	cttcaatcca	aaataaggta	3180
tattattgat	gatggccgca	gcggccccctg	gcgtaatagc	gaagaggccc	gcaccgatcg	3240
cccttcccaa	cagttgcgca	gcctgaatgg	cgaatgggac	gcgccctgta	gcggcgcatt	3300
aagcgcggcg	ggtgtggtgg	ttacgcgcag	cgtgaccgct	acacttgcca	gcgccctagc	3360
gcccgtcct	ttcgctttct	tcccttcctt	tctcgccacg	ttcgccggct	ttccccgtca	3420
agctctaaat	cgggggctcc	ctttaggggt	ccgatttagt	gctttacggc	acctcgaccc	3480
caaaaaactt	gattaggggtg	atggttcacg	tagtgggcca	tcgccctgat	agacggtttt	3540
tcgccctttg	acgttggagt	ccacgttctt	taatagtggg	ctcttggtcc	aaactggaac	3600
aacactcaac	cctatctcgg	tctattcttt	tgatttataa	gggattttgc	cgatttcggc	3660
ctattggtta	aaaaatgagc	tgatttaaca	aaaatttaac	gcgaatttta	acaaaatatt	3720
aacgcttaca	atttaggtgg	cacttttcgg	ggaaatgtgc	gcggaacccc	tatttgttta	3780
tttttctaaa	tacattcaaa	tatgtatccg	ctcatgagac	aataaccctg	ataaatgctt	3840
caataatatt	gaaaaaggaa	gagtatgagt	attcaacatt	tccgtgtcgc	ccttattccc	3900
ttttttgcgg	cattttgcct	tcctgttttt	gctcaccacg	aaacgctggt	gaaagtaaaa	3960
gatgctgaag	atcagttggg	tgcacgagtg	ggttacatcg	aactggatct	caacagcggg	4020
aagatccttg	agagttttcg	ccccgaagaa	cgttttccaa	tgatgagcac	ttttaagtt	4080
ctgctatgtg	gcgcgggtatt	atcccgtatt	gacgccgggc	aagagcaact	cggtcgccgc	4140
atacactatt	ctcagaatga	cttggttgag	tactcaccag	tcacagaaaa	gcatcttacg	4200
gatggcatga	cagtaagaga	attatgcagt	gctgccataa	ccatgagtga	taacactgcg	4260
gccaacttac	ttctgacaac	gatcggagga	ccgaaggagc	taaccgcttt	tttgcacac	4320

SEQUENCE LISTING.txt

atgggggatc atgtaactcg ccttgatcgt tgggaaccgg agctgaatga agccatacca	4380
aacgacgagc gtgacaccac gatgcctgta gcaatggcaa caacgttgcg caaactatta	4440
actggcgaac tacttactct agcttccccg caacaattaa tagactggat ggaggcggat	4500
aaagttgcag gaccacttct gcgctcggcc cttccggctg gctggtttat tgctgataaa	4560
tctggagccg gtgagcgtgg gtctcgcggt atcattgcag cactggggcc agatggtaag	4620
ccctcccgtg tcgtagttat ctacacgacg gggagtcagg caactatgga tgaacgaaat	4680
agacagatcg ctgagatagg tgcctcactg attaagcatt ggtaactgtc agaccaagtt	4740
tactcatata tacttttagat tgatttaaaa cttcattttt aattttaaag gatctaggtg	4800
aagatccttt ttgataatct catgaccaa atcccttaac gtgagttttc gttccactga	4860
gcgtcagacc ccgtagaaaa gatcaaagga tcttcctgag atcctttttt tctgcgcgta	4920
atctgctgct tgcaaacaaa aaaaccaccg ctaccagcgg tggtttggtt gccggatcaa	4980
gagctaccaa ctctttttcc gaaggtaact ggcttcagca gagcgcagat accaaatact	5040
gtccttctag tgtagccgta gttaggccac cacttcaaga actctgtagc accgcctaca	5100
tacctcgctc tgctaatacct gttaccagtg gctgctgcca gtggcgataa gtcgtgtctt	5160
accgggttgg actcaagacg atagttaccg gataaggcgc agcggtcggg ctgaacgggg	5220
ggttcgtgca cacagcccag cttggagcga acgacctaca ccgaactgag atacctacag	5280
cgtgagctat gagaaagcgc cacgcttccc gaagggagaa aggcggacag gtatccggta	5340
agcggcaggg tcggaacagg agagcgcacg agggagcttc cagggggaaa cgcttggtat	5400
ctttatagtc ctgtcggggt tcgccacctc tgacttgagc gtcgattttt gtgatgctcg	5460
tcaggggggc ggagcctatg gaaaaacgcc agcaacgcgg cttttttacg gttcctggcc	5520
ttttgctggc cttttgctca catgttcttt cctgcgttat cccctgattc tgtggataac	5580
cgtattaccg cctttgagtg agctgatacc gctcgcgcga gccgaacgac cgagcgcagc	5640
gagtcagtga gcgaggaagc ggaagagcgc ccaatacgca aaccgcctct cccgcgcgct	5700
tggccgattc attaatgcag gggccgctgc ggc	5733